

Remarks

Claims 1-17 are currently pending. Claims 11 and 16 have been amended. Claims 1-17 stand rejected.

Objections

The Examiner has objected to the disclosure due to the informality of the status of Application No. 10/364,680 as it was requiring update. Applicant has amended the specification herein to update the information, as the referenced application has since gone abandoned, and correct the informality.

Further, the Examiner has objected to claims 11 and 16 stating that claim 11 should more properly depend from claim 10 and claim 16 should more properly depend from claim 15. Applicant has amended claims 11 and 16 to correct the dependency therein and correct this informality. Applicant respectfully asserts that the amendments herein overcome these objections.

Rejections under 35 U.S.C. §103(a)

The Examiner has rejected claims 1-2, 4-7 and 9-11 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,628,894 to Winter et al. in view of U.S. Patent No. 4,947,025 to Alston et al. Applicant respectfully disagrees for the foregoing reasons.

The Examiner asserts that Winter discloses some but not all of the elements of Applicant's claim 1, and cites Winter specifically for teaching a housing, water inlet with hose nipple attached, heating element, a water outlet with hose nipple. The Examiner confirms that Winter is silent as to Applicant's claim element of a lining. See Office Action p. 2. The Examiner asserts that the thermal layer of insulation (39) of Alston is

an obvious addition to Winter to arrive at the present invention. Applicant respectfully disagrees as Alston's layer of thermal insulation does not teach or suggest Applicant's liner, nor is there any suggestion to combine it with the housing of Winter.

Alston teaches that a "layer of thermal insulation 39 completely lines the inside of the housing 11, including access door 26, **to confine the heat** generated by electric resistance heating element 30 **to the interior of housing 11**. See Alston col. 2, lines 62-65 (emphasis added). Alston lines the housing, so heat cannot readily pass from air surrounding the heating elements to the exterior of the housing. To achieve this, Alston employs "[a]ny suitable **thermal insulation blanket material**, e.g. fiberglass insulation of adequate thickness to **maintain the exterior of the heater housing sufficiently cool to permit handling during use** thereof." See Alston col. 5, lines, 26-30.

In contrast, Applicant's claims 1-16 all include the element of a "lining disposed inside of the housing, the lining adapted to protect the inside of the housing from water corrosion." See Application independent claims 1 and 12. Applicant's lining is protective lining contacts the water introduced into and held within the housing for heating by the heating element to prevent it from corroding the housing. See Application paragraph [00327] ("Lining 28 (Fig. 8A) is applied to the inside of housing 14 and lining 26 protects the inside of housing 14 from the damaging effects of the water introduced into portable water heating system 10. Lining 28 can be produced from various materials such as plastic, metal, metal-alloys, rubber, fiberglass, epoxy, synthetic rubber compounds, latex compounds, polyurethane, fiber resin composite materials and combinations of these, however, other materials may be used. ")

It is an important distinction that the housing in Alston does not hold or contact water, but rather encases the coiled water conducting tube which extends throughout the housing. See Alston, col 2, lines 40-43. The coiled water conducting tubing holds and heats the water contained within, as heating elements encircle the coiled water

conducting tubing. See Alston col. 2, lines 45-49. In Alston, water is contained within tubing, and as such, there is no contact by water to the housing. Rather, Alston teaches a thermal insulation layer to line the inside of the housing keeping warm air within the housing (as an energy efficiency mechanism) and which does not and cannot contact water. Alston's thermal insulation layer does not teach or suggest a lining of a water-holding housing and cannot be adapted to be a water-corrosion preventing mechanism. A thermal insulation layer, as in Alston, applied to the inside of a water-containing housing (such as Winter) would adsorb, not retain, water and be unable to prevent contact of the water to the housing, and hence, unable to prevent corrosion of the housing. There is no motivation to put a thermal layer into a water-containing housing such as in Winter. Therefore, Alston's thermal insulation layer does not teach or suggest Applicant's claim element of a lining adapted to prevent corrosion of the housing. For at least this reason, Applicant's claims 1-16 are patentable and non-obvious over each Winter and Alston, alone and in combination.

The Examiner has rejected claims 3, 8 and 12-17 under 35 U.S.C. §103(a) as unpatentable over Winter in view of Alston and further in view of U.S. Patent No. 6,267,084 to Louchart III. The Examiner confirms that Winter does not disclose a high-temperature shut-off element, an element of the claims 3, 8, and 12-17, and cites Louchart as teaching this to be an obvious addition. Applicant respectfully disagrees for the following reasons.

Louchart is directed to an apparatus for curing retread tire assemblies in which retread assemblies are placed into an autoclave and employs a heated water system to heat the air in the autoclave. See Louchart Abstract. To achieve this, the water system must heat water to extremely high temperatures up to 350°F. See Louchart col. 3, lines 15-16. Louchart discloses a heated water system to boil water to temperatures up to 350°F, reaching pressures of 70-90 psi, by use of any suitable water boiler unit which is generally known to include a pressure container, multistage heating elements, a high-

temperature shut-off and pressure relief valves (see Louchart at col. 3, lines 42-47). However, Louchart does not disclose all elements of Applicant's present claims, specifically:

- an adjustable thermostatic control controlling the output of the heating element;
- a first ground fault protection device disposed between an external electrical supply and the adjustable thermostatic control; and
- a high temperature shutoff element located in the adjustable thermostatic control, the high temperature shutoff element protecting the system by shutting the system down when a predetermined threshold temperature has been exceeded.

See Application claims 3 and 8 and independent claims 12 and 17. Specifically, the adjustable thermostatic control is disposed between the external electrical supply and heating element to control the output of the heating element, as recited in the present claims. The high temperature shutoff element located in the adjustable thermostatic control **protects the user** from excessive, dangerous temperatures by shutting down the system when a predetermined threshold temperature has been exceeded. See Application ¶ [0039]. Also, the first ground fault protection device disposed between an external electrical supply and the adjustable thermostatic control, **protects the user from electrical shock**. See Application ¶ [0040]. The reference to water boilers in Louchart does not teach or suggest the aforementioned important *safety features* of Applicant's invention.

Further, it is not suggested to employ Louchart to address the safety concerns in the present application, despite the Examiner's suggestion. Louchart does not discuss safety concerns, as its **normal** operation at high temperature up to 350°F is inherently dangerous, and would not be employed for household use, unlike the present invention. There would be suggestion or motivation to combine or integrate an inherently dangerous, pressurized, industrial water boiler for heating an autoclave (at temperatures needed for *curing* retread tire assemblies) into a household application,

such as Winter, which seeks to provide a *warm* water heater system of the present invention, with safety features incorporated therein, to heat water for ***safe, everyday, household use.***

For at least these reason, Applicant's claims 3, 8 and 12-17 are patentable over Winter, Alston, and Louchart, each alone and all in combination.

For the foregoing reasons, Applicant respectfully submits that all claims as amended are patentable over the references of record and earnestly solicits allowance of the same.

Respectfully submitted,



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